NOTICE OF INTENT TO AWARD GRANTS
2007 VIRGINIA WATER QUALITY IMPROVEMENT FUND

Southern Rivers Watersheds ~ Project Descriptions

The Virginia Department of Conservation and Recreation intends to award grants to the following nonpoint source water quality improvement projects in response to the *2007 Virginia Water Quality Improvement Fund Request for Proposals*, DCR Document #: DCR199-166, issued February 15, 2007. The purpose of these grant awards is to support nonpoint source pollution reduction initiatives targeted to the restoration of streams that fail to meet state water quality standards, or that support protection or restoration of other priority waters such as those containing critical habitat or drinking water sources. Grants are awarded for projects within the Chesapeake Bay Watershed and for watersheds in Virginia that drain outside the Chesapeake Bay, the Southern Rivers Watersheds. The Water Quality Improvement Act requires the list of projects selected for grant awards be made available for public review and comment for at least 30 days prior to executing final grant agreements. Questions or comments regarding this award list should be submitted to Sarah Capps, sarah.capps@dcr.virginia.gov.

City of Danville
Retrofit to Existing Impervious Areas with Bioretention

At least three bioretention basins or bio-filters will be constructed as stormwater retrofits to treat runoff from approximately 3 acres of impervious area that currently drain directly to the Dan River. The appropriate best management practices will be selected based on the final site location and soils investigation. This project will be used to educate the public and demonstrate the City's desire to be part of the stormwater pollution solution. This project will reduce an estimated 2.8 lbs of phosphorus annually. $28,656 WQIF, $28,724 Match.

City of Roanoke
Roanoke Water Quality Enhancements

Three specific projects will be undertaken by the City of Roanoke to address benthic impairments to Tinker Creek/Glade Creek. A denuded area 1,200 feet long by 40 feet wide along the Tinker Creek in Eastgate Park will be re-vegetated to reduce direct conveyance of sediment into the creek. Stream restoration will be performed on a 150 linear feet (6 feet average bank height) section of Tinker Creek using a combination of traditional and bioengineering techniques and natural stability concepts. The Statesman detention pond, which drains 140 acres with mixed land use, will be retrofitted to remove a rubber liner and vegetation will be established to allow the first flush volume to be filtered for water quality. A pictorial chronology of each project from start to finish will be created to raise citizen awareness of how individuals, government, and corporate entities can work together to come better environmental stewards. This project will reduce an estimated 104 lbs of phosphorus and 127 tons of sediment annually. $83,500 WQIF and $99,441 Match.

City of Virginia Beach
Virginia Beach Water Quality Coordination & Program Enhancement Project

The City of Virginia Beach will expand efforts funded under a 2006 WQIF grant to achieve water quality improvements through numerous activities that directly address NPS pollution reductions and focus on waters where TMDLs have been established. A 22,000 square foot extended detention rain garden will be installed on City property at Alanton Elementary School; over four acres of riparian buffers will installed along approximately one mile of shoreline on City-owned park and school lands; and a dry detention pond at Virginia Weslyan College will be converted to a wet pond. Other aspects of the project include expansion of an oyster and clam shell-recycling program for the Lynnhaven River, and construction of an outdoor classroom with a demonstration rain garden at Creeds Elementary. Estimated annual NPS reductions from this project include 60 lbs of phosphorus and 4.79E11 fecal coliform colony forming units. $133,932 WQIF*, $133,932 Match

** WQIF funding is split between allocations from Chesapeake Bay ($73,932) and Southern Rivers ($60,000).*

Dan River Basin Association
Dan River Watershed Riparian Buffer Enhancement

Up to 20 acres will be planted in riparian buffer at locations within the Virginia portion of the Dan River watershed in Henry, Halifax, Pittsylvania, and Patrick counties. This project will target locations along the Dan River and/or its tributary streams, particularly where water quality impairments have been identified. This project will improve water quality as well as address a widespread lack of understanding on the part of riparian landowners and the general public regarding the importance of riparian buffers. Protection of riparian corridors was identified as the top priority in the 2006 Dan River Watershed Protection Plan. $32,875 WQIF, $32,875 Match.

FishAmerica Foundation
Power Dam Removal Project

The Fish America Foundation and the Virginia Rural Area Conservation and Economic Restoration Initiative aim to remove the Power Dam, which is at a high risk for catastrophic failure, and the accumulated sediment from behind the dam to eliminate the risk of possible contaminants in the sediment being released to the waterway. The failing Power Dam is located on the impaired Pigg River in Franklin County. The Power Dam is currently at full storage capacity for accumulated sediments and in its current state significant precipitation events cause scouring behind the dam sending large pulses of sediments, nutrients, and bacteria down river. Removal of the dam will open 80 miles of waterway for aquatic species including several miles of habitat for the federally endangered *Roanoke logperch* and a number of other rare aquatic species. The exact amount of sediment to be removed from behind the dam is still to be determined. At a minimum the project will remove 76,950 tons of sediment as well as the associated nitrogen and phosphorus. $200,000 WQIF, $220,740 Match.

Holston River SWCD
Stabilization Project at Clear Creek Golf Course and Installation of Pet Waste Disposal Systems

Streambank stabilization and pet waste management are two urban control measures identified in the Beaver/Little Creek TMDL Implementation Plan that will be implemented in this project. A total of 1,365 linear feet of stream bank will be stabilized at several sites on Clear Creek, a tributary to Beaver Creek, using vegetation and/or heavy armor materials such as riprap and coconut logs; and 2,882 linear feet of lakeshore will be restored and protected using vegetative buffers and heavy armoring along the Clear Creek Golf Course in Washington County. In addition, up to ten pet waste disposal stations will be purchased and installed at three public parks in the City of Bristol. Educational posters and brochures on picking up pet waste will be distributed to veterinarian clinics, kennels, and pet supply stores in the Beaver and Little Creek Watershed. Stabilization of stream bank and lakeshore sites are estimated to reduced 282 tons of sediment from eroding annually. The pet waste stations will result in a 25% pollution reduction for fecal coliform bacteria loads from pets. $55,347 WQIF, $78,220 Match.

New River-Highlands RC&D
New River Streambank Restoration - Phase II

Streambank restoration and protection of 6,600 linear feet will be undertaken by the New River Highlands RC&D. Restoration activities are targeted to 5 sites benefiting impaired stream segments in the New River watershed. Preliminary sites are located along Knob Fork and Little River in Grayson County, Little Reed Island in Wythe County, Toms Creek in Montgomery County, and Claytor Lake in Pulaski County. The project will focus on new BMPs such as stream barbs or deflectors, streambank toe protection, J hooks, and vegetative controls such as cedar tree revetments, bio logs, sloping, shaping and establishment of vegetation. Riparian buffers will be established at all sites. An estimated 1,225 tons of sediment will be reduced annually through streambank and stream channel stabilization. $96,150 WQIF, $97,261 Match.

Roanoke County, Department of Community Development
Mudlick Creek Urban Stream Restoration at Garst Mill Park, Phase II

Approximately 2900 linear feet of stream will be targeted for restoration along Mudlick Creek at the Garst Mill Park in Roanoke County. The project will restore the equilibrium channel geometry recreating meanders and utilizing the floodplain to reduce streambank erosion, restoring the in-stream habitat structure and augmenting the riparian cover through native vegetation plantings. This project continues with Phase II of a 2006 WQIF grant aimed at restoring another section of this same creek. Restoration along Mudlick Creek, a tributary of the Roanoke River, and will help to address impairments to this larger waterway. Estimated annual NPS reductions from this project are 1,556 lbs of nitrogen, 532 lbs of phosphorus, and 659 tons of sediment. $110,000 WQIF, $144,782 Match.

Southampton County
Southampton County Stormwater Management and LID Demonstration Project

Southampton County will voluntarily implement a stormwater management program to manage anticipated growth from the Port of Virginia expansion and other future development. Implementation of low impact development (LID) principles will be encouraged in the new stormwater management ordinance. The County will also construct a large-scale LID demonstration at a 493-acre site planned as a developing distribution center / Industrial Park to serve as an example to developers, engineers, and County staff. The bioretention and infiltration BMPs at the Industrial Park will encompass approximately 4 acres. An estimated 163 lbs of phosphorus will be reduced annual as a result of this project. $135,000 WQIF, $529,798 Match.

Upper Tennessee River Roundtable
Upper Powell Stormwater Management and Abandoned Mined Land Reclamation Project

Seven impervious surface retrofits will be constructed to treat drainage from 2.32 acres with an average of 87% impervious surface at the Coeburn High School. These retrofits include five bio-retention basins totaling 4,700 square feet and two grassed swales. The bioretention facilities are intended to improve water quality in Toms Creek, a tributary to the Guest River in Wise County, reducing sediment loads contributing to the Aquatic Life Use TMDL impairment as identified in the Guest River TMDL Implementation Plan. In addition, seven acres of abandoned coal mining lands will be reclaimed through establishment of permanent vegetation across the site and stabilization of 200 feet of stream channel. The reclamation activities are at a site in Keokee, Lee County and will help to improve water quality in the headwaters of the North Fork Powell River. Estimates annual NPS reductions include 2.2 lbs of phosphorus from the stormwater retrofits and 56 tons of sediment from the abandoned mine land reclamation. $97,340 WQIF, $97,347 Match.

Virginia Department of Game & Inland Fisheries
Southern Rivers Restoration Project

Stream restoration will occur on over 7,000 linear feet at numerous sites in the Upper Tennessee and Upper Roanoke River Basin where rare, aquatic species occur. Natural channel design methods, soil bioengineering, and riparian plantings averaging 35' width will be used at multiple sites. The project is targeting restoration of 4,000 linear feet of critical riparian and streambank habitat in the Upper Roanoke River Basin within the North Fork Roanoke sub-watershed and 3,000 linear feet in the Upper Tennessee River Basin, particularly Beaver Creek, Bluestone River, Guest River, and Upper Clinch River sub-watersheds. In addition, a stormwater retrofit will be installed to reduce sedimentation in the Beaver Creek Watershed. The sites identified for stream restoration will help to address impairments on several streams located in the City of Bristol, and Montgomery, Tazewell, Washington, and Wise Counties. The stream restoration aspect of this project is estimated to reduce 2,580 tons of sediment. $200,000 WQIF, $200,000 Match.

Virginia Department of Mines, Minerals and Energy
Hurricane Fork Gob Piles

Four acres of barren and eroding gob piles (coal waste) will be reclaimed and 200 feet of riparian buffer restored at a site along the Hurricane Fork of Dumps Creek. The project is located immediate above the impaired sediment of Dumps Creek, for which resource extraction from past mining activities is identified as the primary source of the benthic impairment. Total dissolved solids and total suspended solids in Hurricane Fork will be reduced through an estimated annual reduction of 32.5 tons of sediment. $140,000 WQIF, $140,000 Match.

Virginia Polytechnic Institute and State University - Wynn
Stroubles Creek Stream Restoration

A total of 7,290 linear feet along Stroubles Creek and an unnamed tributary will be restored at the Virginia Tech Foundation's Heth Farm in Montgomery County. This site was identified in the Stroubles Creek TMDL Implementation Plan based on the need for stream restoration and establishment of forested riparian buffer to reduce sediment loadings. Standard methods of streambank stabilization and restoration will be implemented and monitored for effectiveness including bank reshaping and stabilization, and natural channel design. A Priority 4 restoration for reshaping and revegetating the banks will be conducted on 4,440 linear feet, and a Priority 2 restoration for natural channel design will be conducted on 2,850 linear feet. Riparian buffers will be installed along the majority of the impaired reach. Virginia Tech students will use the site as an outdoor stream laboratory to study the effectiveness of various stream restoration techniques. $167,200 WQIF, $167,200 Match.